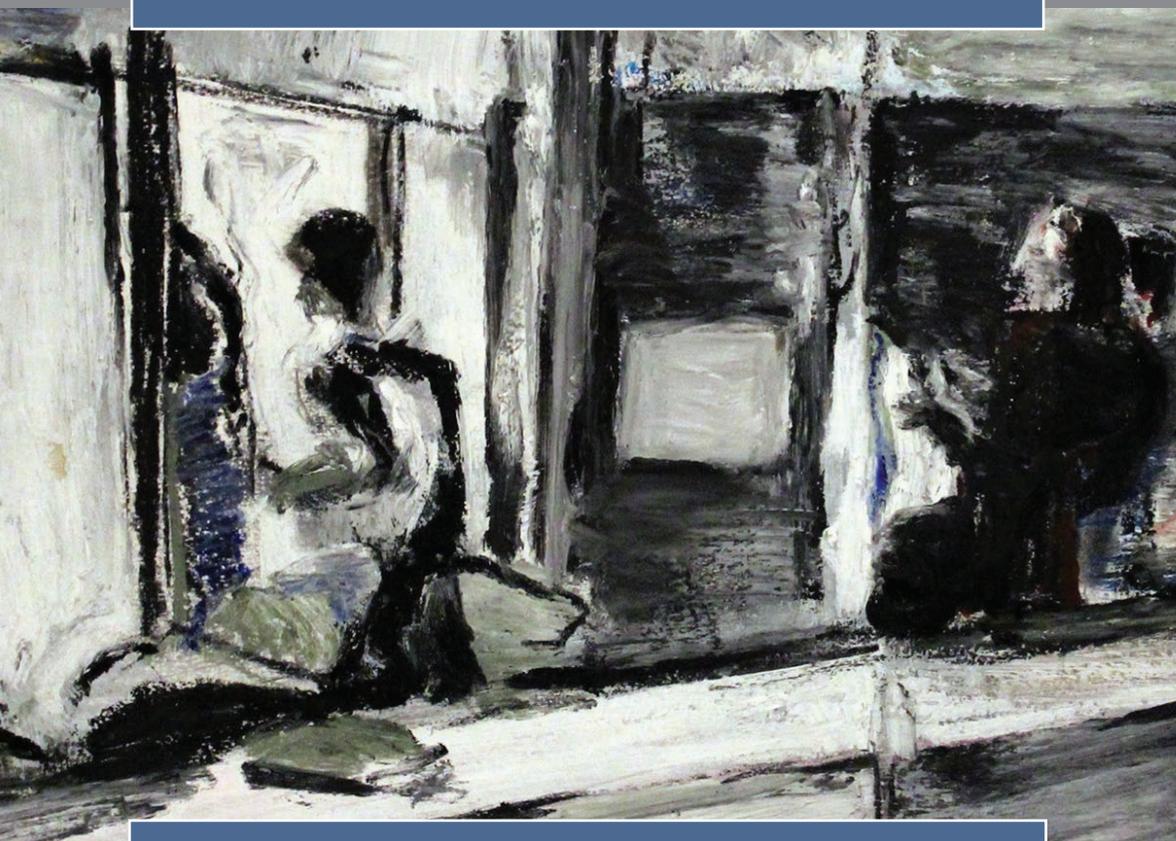


On the Facilitation of the Academy

Elias Westergaard and Joachim S. Wiewiura (Eds.)



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Edited by

Elias Westergaard and Joachim S. Wiewiura

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INTRODUCTION

THE AIM OF FACILITATION

It is due to its social, cultural and political significance that the Academy cannot afford to be an ivory refuge. In the same manner, it should not be a romantic, dishonest utopia. A facilitator of education may toil with the ideal of the learning institution, but just as the Garden of Eden, the womb of untroubled life, represents an elusive chimera of reality, so does any strive for a rosy and peaceful space for academic endeavour misrepresent our aim with this book.

The facilitation of the Academy is not aiming towards unworldly or nostalgic ideals of, say, Plato's Academy or Aristotle's Lyceum. The easy abstractness of such places must not lead us astray into a precipitate striving for perfection. Nor, however, must we forget that such places existed. The existence of ideals, in the necessary criticism that they should meet, does not preclude the possibility of collecting sensible norms from these distant images. What is important is how one mobilises such ideals in the attempt to inform our educational issues today.

The idea of copying the design of the ancient schools with technical diligence, installing the crucial details of the Lyceum in our time, is underpinned by a general optimism that conflates the word facilitation with design. If design is the possibility of a certain, particular function that should prevail through a material configuration while educational issues, on the contrary, escape such a predetermined function, then the designer's aim is not of our concern here.

As educational variety and diversity should yield a plurality of institutions within the educational landscape, designing the perfect institution seems insufficient for the purpose. This book addresses contemporary educational issues from the perspective of facilitation – as opposed to design, so defined. The contributors share common concerns, but are distinctly variegated in their approach and focus. Before attending these, let us explain how the concept of facilitation might be useful in even the most rigid structures of higher learning institutions: architectural design.

THE ACADEMIC SPACE

Spatial features are channels for communicative actions. To the avail of fostering helpful, academic communication in any higher learning institution, one must consider the space occupied by students, faculty and administration. Issues such as transparency in opposition to Kafkaesque (lack of) communication, student-faculty-ratio, financing, teaching methods and evaluation techniques are all important, but our introductory concern is the actual walls, floors and corridors of

the most common university institutions. In other words, how architecture facilitates specific kinds of communication.

In the architectural classic “Figures, Doors and Passages” from 1978, Robin Evans argues that the installation of the corridor has reduced incidental communication. The corridor reroutes all in-house communication by creating an infrastructure that is completely reserved to traffic. Prior, transit was to be executed through the passage of rooms. Leaving rooms to have many doors thus constructed them to function as thoroughfares which, of course, disturbed the private individual who desired seclusion.

[I]n facilitating communication, the corridor reduced contact. What this meant was that purposeful or necessary communication was facilitated while incidental communication was reduced, and contact, according to the lights of reason and dictates of morality, was at best incidental and distracting, at worst corrupting and malignant. (Evans 1997, 86)

(It goes without saying that) to think about the communication of knowledge within higher learning institutions, one must take into account which communicative channels one offers one’s students and faculty members. If lone contemplation is seen as the sole activity of knowledge production, truth must be sought solitarily, through isolation, letting only purposeful disturbances trouble one’s path.

As such, learning spaces in the form of classrooms or reading halls are spatial channels that are constitutive to thought. These academic spaces cannot flourish without being somewhere and, in this way, communication needs a texture that isn’t simply vocal.

Academic communication, however, does not come in neatly closed packages but consists often of open-ended, chaotic dialogues. Within the facilitation of learning one should therefore be careful about reducing incidental communication by way of architectural isolation of faculty from students. Notwithstanding the obvious benefits of scholarly concentration in closed-off spaces, the issue of communication at the architectural level in higher learning institutions appears to have been left in the shadow of other issues of academic facilitation.

ACADEMIC ATTACHMENT

Communication within academic institutions seems to be one of the core issues of facilitating education. The type of communication that is being pursued within these spaces is crucial for understanding the kind of facilitatory direction a teacher, institution or even society take to be their educational ambition. Recently, David Hayes has argued (2014a,b) that the “current favourite justification” of the Humanities is to teach students how to become competent critics: to think critically about structures of society, culture, politics. “A critical stance is a dissociative stance. Study is impoverished when it is thought that its chief aim is the cultivation of habits of dissociation from one’s own opinions (and, more often, the opinions of others)” (Hayes 2013). Academic attachment must be understood as a supplement

to raising these critical voices, and critique must not be understood as a dissociative, structural procedure without individual assessment of what is important to that person.

As Michael Roth puts it, “[c]ritical thinking is sterile without the capacity for empathy and comprehension that stretches the self” (2010). Going back to the spatial dimension of academic learning, any sharpening of cognitive skills, critical abilities or understanding complexities within a field of study must be exercised within a physical space where vocabularies can expand, ideas be expressed and assessed. In the first chapter of this book, Birgit Schaffar and Michael Uljens elaborate upon the conflicting elements within institutionalised higher education that goes back to the Humboldt University of the 1810s. Drawing on the concepts of *Bildung* and *Ausbildung* from von Humboldt, Fichte and Schleiermacher, they argue that while administrative structures enable the place of learning, the performance of *Bildung* tends to conflict with these external requirements. The main problem is how to tackle the openness of *Bildung* within the framework of formal education (*Ausbildung*). A seemingly paradoxical situation arises as the administrative pillars structure academic learning by providing external features that are not a part of that process of learning itself.

At a micro-level, students may also encounter this oppositional structure of administrative processes that obstructs learning. In the second chapter, Ray Land argues that structural requirements are directly constitutive of genuine learning. Education is very often structured through students’ encounters with their curriculum, that is, “the nature of the knowledge we wish our students to encounter, and the nature of their learning and engagement.” The intake of knowledge and the processual structure of learning can be facilitated by presenting to the students crucial features of the subject-matter. These features are often sealed in discomfiting concepts that must be unpacked and scrutinised to the level of genuine understanding. Such ‘Threshold Concepts’ necessarily situate students in anxiety-provoking states of liminality and cause what Land denotes as an ontological shift within the subject. Once such a threshold is passed, the subject-matter shows itself in new, more profound ways to the student. The threshold approach to curricula that Land presents urges academics to rethink the didactical, structural and chronological appropriation of their subject-matter and to not only focus on teaching or pedagogical exercises, important as they are. It “incurs a reconstitution of self, a shift in subjectivity. Grasping a concept is never just a cognitive shift; it also involves a repositioning of self in relation to the subject.” As such, academic attachment is constitutive for attaining knowledge and cannot be distinguished from the core subjectivity of the learner.

That there is always something slightly disturbing about proclaiming the philosopher as the immaculate medium of knowledge is shown through an analysis of Hegel by Mladen Dolar. In this third chapter, Dolar portrays Hegel as the figure that embodies the university ideal – knowledge for the sake of knowledge – as he is the first professor at the Humboldt University, which had three key features: i) knowledge as an end in itself, ii) knowledge as connected with *Bildung* and iii) the combination of the two previous features such that knowledge was seen as the

ultimate development of autonomous subjects without complying to economic, social or political needs. At the same time, however, Hegel's figure as professor was undermined for the sake of knowledge which stood for itself as its own ultimate end: Knowledge became the "mastery universalised," and the professor became a mere medium through which universal knowledge was impartially communicated.

A counter-movement to this universalised knowledge, "that authority, along with all institutions of power, stems from knowledge," is by Dolar identified as the revolts of May '68. Along with the demand for democratisation, free access to higher learning institutions and inclusion of what Dolar labels 'subversive knowledge' (Marxism, psychoanalysis, woman studies, post-colonial studies), knowledge becomes contingent and exists for the sake of something other than itself: Efficacy instead of truth and production instead of autonomy, for example.

However, "the demotion of the authority of knowledge, its functionalisation, actually reinforced and bolstered the university discourse." The revolt against the mastery of knowledge turned out to be expanding the mastery under the guise of efficacy, utility and production. In facilitating the Academy within and without the architectural boundaries of the university, it is this dynamic that one must become aware. "The point is to make stark interventions into the ambient social texture, with theoretical innovations, while maintaining the intellectual freedom and autonomy, the spirit of collectivity, the independent intellectual pursuit and the best standards of knowledge, independent of university framework."

The psychoanalytical exposition of the university discourse is continued by Henrik Jøker Bjerre in the fourth chapter, and there seems nowhere to neutralise the power of this discourse no matter how open and non-hierarchical the structure:

The peer review system itself is an interesting feature of this double tendency: Although there is something to be said for this procedure (it does in fact sometimes tend to improve papers), it nonetheless symptomatically expresses the core values of anonymity and neutrality that are the ideals of the university discourse. It is not your master or your friend who approves of your paper; it is Knowledge itself, the global structure of academia that operates through the body of your anonymous peer.

In the light of this tendency the administrative frame of academic life has become de-personalised and subject to a form of control that is beyond anyone's reach. In psychoanalysis, however, the analyst's task is to remain silent (only intervening with questions) and thereby to "make thinking take place, but not to inform the analysand how or what to think." In this way, the questioning has no predetermined goal, but rather to explore and investigate the unknown and concealed. With the concept of hysterisation, inquiry into the chaotic, the agitating and the unknown becomes all the more pertinent to facilitation. Hysterisation, then, can be mobilised in terms of academic attachment that runs deeper than superficial understanding, schooling and conformity.

With the concept of hysteresis, Jøker Bjerre elaborates the view that knowledge production avoids a linear model of progression. Learning is not an untroubled mapping of the world through successful knowledge possession:

But what if failure is a necessity for any progress in thinking? Maybe the danger is not that students of, say, first year in university will fail to understand all the lectures and all the texts, they meet. Maybe the real danger is that they will understand them too quickly!

Genuine understanding is thus (with proper precautions of course) not a pleasant or compliant experience precisely because it is chaotic. In broader terms, knowledge flourishes within and through complex networks of students, professors, review-systems wherein the overview of the existing knowledge is never present. As such, in the fifth chapter David Budtz Pedersen argues that

[t]here exists no real-time knowledge of what is happening in the network. The actually existing knowledge organisation is the chaotic and complex sum of all scientific and organisational activities. Therefore, knowledge institutions, such as universities and academies, cannot be the object of traditional bureaucratic planning and management. The inherent complexity of knowledge production constrains a complex, reciprocal set of interdependencies that limit the scope of top-down management.

If advancement of research (or basic learning) is impossible through exact planning and entails non-controllable academic spaces, the structural engagement with coincidental meetings of peers seems crucial. Other strategies or control mechanisms must be sought out, then, as traditional bureaucratic structures seem unsuitable to manage these inherently complex and chaotic knowledge productions. Academic communities (within or beyond the institution of the university) must take a front-role, Budtz Pedersen argues, in order to instantiate collaborations across the purely institutional level.

Moreover, academic collaborations cannot be attained by (pre-)established arrangements that try to curb cheating and scientific dishonesty. He argues that it is the social norms of the community itself that restrain these. Traditional management of the academy within the university seems to not be applicable to company strategies with a high-level of central planning.

In the sixth chapter, Artur Matos Alves argues against the political intervention in terms of standardised rhetorics – the rhetorics of innovation – and in favour of a pluralistic allowance within the university institutions and their relation to the rest of society.

Accommodating, and even fostering, pluralism should be at the core of academia in democratic, inclusive societies. In this open environment, institutional diversity would allow for the creation of multiple models of interpenetration between economy, civil society and academia: social activism and entrepreneurship, non-governmental organisations, private

companies, corporations, government, public bodies – all of them can find in academia interfaces for contact, exchange and partnerships.

The pluralism that the institutional landscapes of academia (should) offer to society must at least in part engender thinking that isn't always connected with the given political situations, social norms or cultural situations. Alternative, indecorous or even dangerous thinking (as Alves calls it) must not be obstructed or structurally disabled through a too thorough emphasis on non-wasteful knowledge production through the administrative enforcement of linear systems.

The shared worry of these contributions – the meaningful yet troublesome attachment between academic identities, communities and their social pertinence – is brought to a personal level in the seventh and last chapter by Steen Nepper Larsen. That the academy could live within the university institution is to a large degree dependent on the role of the teacher and their ability to properly teach their students. Simultaneously, good teaching is not an intellectual catering to the whims of the students. Good teaching is arrogant, he states, in the sense of pushing students to exert their best intellectual effort. The facilitation of the academy must come from a personal attachment as “the student enters the higher educational institution by crossing a threshold into a new form of existence,” which very much resonates with Land's ‘ontological shift,’ Dolar and Jøker Bjerre's recognition of the concealed master and emphasis on ‘hysterisation,’ Budtz' ‘collaboration’ as essentially chaotic and Alves' ‘dangerous thinking.’ Essentially, these forms of uncertainty that are deeply rooted in the concern for the facilitation of the academy, a normative category distinct from the university institution, must in a genuine sense begin with Schaffar & Uljens' exposition of academic attachment and its relation to formal education.

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1. PARADOXICAL TENSIONS BETWEEN BILDUNG AND AUSBILDUNG IN ACADEMIA

Moving within or beyond the Modern Continental Tradition?

In the following article we aim to sketch the classical notion of Bildung (liberal education) in contrast to Ausbildung (formal education, schooling). To begin, we will exemplify this tension with the help of some central thoughts in the Continental tradition where von Humboldt, Fichte and Schleiermacher describe how the university should be organised and structured. They have all strived for the ideal of Bildung while at the same time trying to find a suitable structure or form of organisation in its particular social, political and historical circumstances, which leads to what would be called Ausbildung. We will then give a short overview over the central points of the criticism that has been raised towards this notion of Bildung. Finally, we will sketch two positions in regard to the question of how the ideal of Bildung can be kept alive in the striving for nothing less than the good, the true and the beautiful, although we have to work within structures that by necessity more or less hinder this striving. This article is an introductory overview over the Continental discussion about Bildung.

ON THE NOTION OF BILDUNG AND AUSBILDUNG

The complex notion of Bildung has been well studied, analysed and documented throughout its history.² In the following, we want to highlight only some aspects of its long history.

Although the word Bildung already suggests the notion's deep connection with the German cultural and linguistic sphere, it is important to see that the notion of Bildung draws our attention to something that has been discussed throughout Western civilisation and philosophy. The root found in the history of Western ideas goes back to the ancient Greeks and the Hellenistic philosophy of *cultura animi*, meaning spiritual cultivation or the refining of the soul (Schwenk 1996; Rehn 2008). The usage of the word Bildung itself can be traced to Christian theology and its educational concept of *Imago Dei*. *Imago Dei*, literally meaning God's image, points to the Judeo-Christian doctrine that views human beings as created in God's image and His likeness (1 Moses 26-27). In this tradition, it has often been discussed that human beings are created in the image of God, still standing before the task of fulfilling this "likeness." This view is not directly teleological; although the seed is planted in human beings at birth it is not determined how it will develop. However, as the preconditioning cosmology is framing the whole idea of

what it means to become a human being in a fulfilled sense, this frame strongly delimits what it is possible “to become.” Human beings are in need of maturing and becoming worthy of His image, while at the same time it is forbidden to make any image of Him (cf. the Ten Commandments). This seemingly ambivalent movement, to strive for something that one cannot picture in advance, is a vivid figure in the later educational-philosophical notion of *Bildung* that was initially introduced by the late medieval theologian and philosopher Meister Eckhart. The linguistic root of *Bildung* is the German word *Bild* (image), which can even be found in several other related German notions: *bilden* (to create, to form), *Bildnis* (picture), *Vorbild sein* (being a role model) (cf. e.g. Siljander & Sutinen 2012; Meyer-Drawe 2007; Ballauf 1953).

When discussing *Bildung* today, we normally refer to the modern (classical) sense of *Bildung* that goes back to the 18th century and covers a mainly German-speaking philosophical and educational tradition. Following the thought of Wilhelm von Humboldt, we must elucidate some further central notions. Like Herder and Schleiermacher, von Humboldt argues that the individual’s relation to the world is considered open (von Humboldt 1969, 235). He describes the process of *Bildung* as an “Auseinandersetzung” or “Wechselwirkung” of a human being with the world. Depending on the context, “Auseinandersetzung” can, on the one hand, be translated as an interaction, a debate, a controversy and an argument or, on the other hand, as an intellectual, artistic involvement and critical examination of something. Central to the educational tradition that followed from this definition is the idea that education and learning cannot be separated from the content (the world) of what is or should be learned. The process of maturation through *Bildung* depends essentially on the specific cultural content a human being is confronted with. Central didactical questions throughout the German-speaking educational tradition have therefore been how the content of the curriculum as a whole, but also the content of every subject and every theme, should be structured to guarantee, or at least support, the intended development of the human mind and character. In the *Bildung*-theoretical approach, a longstanding debate has concerned itself with to what extent content as such should be mastered (material theories of *Bildung*) and to what extent content should be viewed as a vehicle or medium for the development of an individual’s more formal capacities, e.g. to solve problems (formal theories of *Bildung*) (Klafki 1959).³ The focus is therefore on the teacher’s task and opens up those qualities of the content that may have the potential to support an individual’s moral and intellectual growth (*Mündigkeit*).

For a short comparison: while the *Bildung*-tradition connects the mastery of subject matter with the teaching activity by viewing the former as a necessary prerequisite for the latter, the Anglo-Saxon (or the teaching tradition) rather disconnects the method of instruction from the content on psychological grounds. Etymologically, teaching is derived from the Indo-European concept of ‘taecan’ which refers to the evocation of a response by the other through the use of signs. Here the teacher mediates between the sources of insight and the learner, but does not necessarily possess the content. In contrast, in the *Bildung*-tradition, the teacher is a learned person who, by mastery of the content, facilitates the study activity

necessary for learning. In both German and Finnish, the same core concept (*Lehre, oppi*) is used to denote the teacher, the teaching activity, the learner, the learning process as well as the content. Instructional methods such as techniques to be mastered cannot then be discussed in isolation in the Bildung-tradition. This also indicates that the content and the way it is experienced are the medium for the teaching-studying-learning process.

Further, the paramount position of subject matter (content) in the Bildung-tradition means that the question of the *selection* of the right content is most crucial. This selection is made, first, on a cultural-societal and political level allowing for a discussion of reproduction (tradition) and reform of the culture. Second, the teacher is allowed a certain freedom on the interactional level to select and work with suitable pieces or dimensions of the content in order to release the educative dimension (*Bildungsgehalt*) of it (*Bildungsinhalt*) in relation to the student's previous experiences.

Due to the central position of content, decisions concerning what content should be chosen are naturally required. In this process, the aims of education cannot be avoided. Therefore the aims of education are also internally related to content and methods. The classic didactic triangle focusing on aims, methods and content describes this unity.

Bildung can be viewed both as an individual process and a process that simultaneously has to be understood in relation to external influence. We emphasise that the *process* of Bildung must be related to the concept of intentional education. Education (*Erziehung*) refers to the active invitation or demand directed towards the Other to interact with the world. At least after Fichte, Bildung and education may be understood as relational concepts referring to each other. In German literature, active involvement as a self-reflective process is also called *Bildsamkeit*. Education as a call for engagement is an intentional interruption in the Other's relation to the world, to others and to self. Therefore, Bildung differs from a pure biological process of maturation and growth and instead stresses the specific *human* character in this development. Kant expresses this in the famous quotation: "Man can only become man by education. He is merely what education makes of him. It is noticeable that man is only educated by man – that is, by men who have themselves been educated" (Kant 1900, no. 7). In 1796, Fichte presented his critique of the Kantian transcendental idealism and developed the idea of education as a necessary intervention or provocation in order for the individual to reach cultural or productive freedom. Although Kant assumes the necessity of *Erziehung*, that is, external influence, Fichte points out that the individual has to be recognised as free but still educated to reach maturity, i.e. towards cultural independence.⁴ For Herbart, the necessity of education for human Bildung is called 'pedagogical causality' through which he mediates between, on the one hand, a transcendental freedom according to which subjects may define the meaning of their experiences by themselves, and, on the other, external influence that would determine the subjects. Education is thus considered as something necessary but which does not have a determining character.

As an explicit mutual process between a human being and the (material and social) world, *Bildung* is by Schleiermacher described as a tension between the individuals' 'spontaneity' towards the world, as well as their 'receptivity' (Uljen & Mielityinen 2004).

In discussing *Bildung* we must observe that individual and societal changes are interconnected. In accordance with the Enlightenment optimist view, there was a belief, or hope, of constant improvement and progress of mankind through education, (scientific) knowledge and insight. The progress, teleological in nature, was to occur as a gradual change from one generation to the next. Consequently, the modern concepts of *Bildung* and education may be seen as theoretical constructs dealing with the individual's development but in an intergenerational perspective. This process had a direction but was open. The new question was how to pass on culture to a younger generation without reducing educational activity to pure reproductive socialisation into cultural practices and norms that were given. How to educate a child who was no longer considered to be determined by biology or cultural heritage? How to educate for a future that, by definition, cannot be known? How to prepare for the future, given that the future is radically open and in fact dependent on how the future generation itself chooses to act? How to support the individual's development to become an independent and autonomous but continuously growing and developing member of an ever-changing culture? In conclusion, the present no longer contained the keys for the future. Simultaneously, ideals which would be used as norms for education could no longer be determined specifically. In the modern, secular and plural world where individuals are equipped with modern freedoms (religion, vocation, speech) a question to be debated was how the younger generation was to be educated. Tradition itself did not provide the answers. As Schleiermacher expressed it, we had to learn to live in accordance with the question, and not the answer, of what could be considered a good and valuable life. From then on, the question of a good life became a guiding principle. Of the many parallel answers to this question not one was self-evident. In addition, to educate only by a positive answer would be counterproductive and reduce the possibilities and responsibilities of the future generation.

The openness in the *Bildung*-process, the radical necessity of not being able to determine the result of *Bildung* in advance has led to theoretical difficulties in defining *Bildung* as such.⁵ Whether the idea to define *Bildung* in itself is contradictory has been widely discussed as a definition would already imply conceptualisation – e.g. to catch, determine, fix or entrap the meaning of something that explicitly tries to indicate something with an open meaning (for an overview see e.g. Thompson 2009, 7ff). In a way, this is coherent with the *Bildung*-tradition itself: what *Bildung* is must be seen as a topic of continuous negotiation. Throughout the *Bildung*-theoretical tradition, *Bildung* has therefore mainly been discussed in contrast to what it is not. Leading themes in this educational tradition (or actually in the Continental philosophy as such) are in this respect the notions and experience of 'dialectic,' 'indefiniteness,' 'negativity' and 'borders' in order to describe *Bildung* from its opposite (for some examples from contemporary

educational theory see Masschelein & Wimmer 1996; Meyer-Drawe 2000; Benner 2003, 2004; Ricken 2006; Biesta 2006; Thompson 2009).

Bildung is often contrasted with Ausbildung, or formal education. Though definitions of what precisely is meant by Bildung and Ausbildung have shifted throughout history and throughout specific political and cultural circumstances, Bildung is thought of as an ongoing and radical open-ended process, while Ausbildung has become the term that indicates an educational process with an explicit aim (such as focusing on citizenship or vocational education). In this respect, the distinction often aims to contrast between the education of the next generation for its own sake (an absolute conception: Bildung) and education in an instrumental sense (a relative conception: Ausbildung). This means, that Bildung and Ausbildung do not differ in content or method of teaching. Rather, their fundamental difference lies in the *attitude* towards knowledge: whereas Bildung focuses on the formation of the subject in terms of human maturity and autonomy, including identity and personality (who am I?), the educational process understood as Ausbildung focuses on competence (what am I?).

In the following, we want to deepen the contrast between Bildung and Ausbildung with the help of some central essays in which Fichte, von Humboldt and Schleiermacher argue for the establishment of the modern (Continental) university – in their case the University of Berlin. Our concern is that in an era of increasing instrumentalisation of knowledge and taming the universities to increasingly serve pragmatic and economic progress in post-industrial knowledge societies, the traditional concept of Bildung has become less significant as a point of reference.

THE IDEA OF MODERN ACADEMIA

As is commonly known, von Humboldt as the Minister of Education had the opportunity to plan and organise the Prussian educational system for the upper secondary education and the university. In 1809/10 he wrote *Über die innere und äussere Organisation der höheren wissenschaftlichen Anstalten in Berlin*⁶ and *Antrag auf Errichtung der Universität Berlin*⁷; two writings that together with Fichte's *Deduzierter Plan einer zu Berlin zu errichtenden höheren Lehranstalt*⁸ (1807) and Schleiermacher's *Gelegentliche Gedanken über Universitäten im deutschen Sinn – Nebst einem Anhang über eine neu zu errichtende*⁹ (1808) illustrates how modern philosophers thought about the university, understood as the highest possible educational institution, and how it should be structured and organised in order to guarantee the possibility of Bildung. Besides what is commonly known about Humboldt's ideas on university (freedom and indivisibility of teaching and research) we want to bring the tension between Bildung and Ausbildung into focus. The texts balance between these two points in an ongoing movement. In their descriptions of the possible structure of a university, von Humboldt, Fichte and Schleiermacher pay attention to the ideal of Bildung while at the same time remaining aware of the need to tackle the openness of the notion and the need to constitute and construct a certain institutional

structure which, in their view, always implies the risk of constraining the possibility of Bildung (cf. von Humboldt 2010a, 230f; Fichte 2010, 30).

There is, on the one hand, the indefinability and openness of the process that students will go through, the demand *not* to instruct them too much, but let them find their own way and insight in order to promote a development toward independent thinking. On the other hand, there is the insight that this openness has to be solidified or hardened (*verfestigen*) at several points to guarantee the progress and improvement of both the single student's as well as mankind's Bildung-process. Fichte calls the second chapter of his essay "Wie unter den gegebenen Bedingungen der Zeit und des Orts der aufgegebenen Begriff realisiert werden kann"¹⁰ (Fichte 2010, 30), and von Humboldt stresses that the state that provides the outward frame for academic science and research always should keep in mind

dass, da es nun einmal in der positiven Gesellschaft äussere Formen und Mittel für jedes irgend ausgebreitete Wirken geben muss, er [der Staat] die Pflicht hat, diese auch für die Bearbeitung der Wissenschaft herbeizuschaffen;

dass etwa nicht bloss die Art, wie er diese Formen und Mittel beschafft, dem Wesen der Sache [der Bildung] schädlich werden kann, sondern der Umstand selbst, dass es überhaupt solche äusseren Formen und Mittel für etwas ganz Fremdes giebt, immer nothwendig nachtheilig einwirkt und das Geistige und Hohe in die materielle und niedere Wirklichkeit herabzieht;

und dass er daher nur darum vorzüglich wieder das innere Wesen vor Augen haben muss, um gut zu machen, was er selbst, wenngleich ohne seiner Schuld, verdirbt oder gehindert hat.¹¹ (von Humboldt 2010a, 231)

Von Humboldt stresses in this quotation that certain forms and means are needed to frame and structure academic work. He argues that although these forms and means will be extrinsic to academic work, and although they will limit and in some sense hinder a qualified performance of academic work, it is the state's duty to provide structures, means and forms to make academic work possible at all. In von Humboldt's, Fichte's and Schleiermacher's view, organisational structures are always limiting, but cannot be avoided. In this way, they are just a more or less necessary evil.

Von Humboldt, Fichte and Schleiermacher distinguish very precisely between knowledge and education for the sake of the nation and society (Ausbildung) and the striving for knowledge and education for its own sake (Bildung). Both are important and have the right to demand their existence and need, but these philosophers underline the importance of being aware of how striving for instrumental knowledge and competence can hinder and restrain the search for knowledge in the sense of Bildung. Schleiermacher entitles the first introducing paragraphs of his essay *Vom Verhältnis des wissenschaftlichen Vereins zum Staate*¹² to expounding on the fact that the state is the best frame for the academic endeavour (ibid., 126, 129), and also that the state is essentially in need of Bildung, both because of the educational implications for the citizens and because

of the usage that the state can make of the academic results (ibid., 129). This is why he explicitly warns against two mistakes that, according to him, had already taken place in too many German states in his time. First, there was a misunderstanding concerning competition: some governments competed for being the centre of academic communication. According to Schleiermacher, they tried to bind everything that has some academic worth to its institutions even with the risk of putting other states (and their educational institutions) in an intellectually or educationally scant position. Schleiermacher argues that he would have no objections in case these states would work together in favour of the smaller ones that might not be able to afford the highest standard in every academic field, e.g. in case the states would try to bring together academic talents to provide a better environment for academic endeavour as such. But he criticises that the states in question rather aim at being independent of others, which he calls a “hochmütige, verderbliche Prahlerei”¹³ (ibid., 132). He admits that this way of gaining domination over others might be “die friedlichste und schönste Art der Eroberung.”¹⁴ In this he spells out what would 200 years later become common business practice in Academia: “der Wissenschaft kann es leicht gefährlich werden, wenn das bloße Geld den Gelehrten zur Lockspeise gemacht wird”¹⁵ (ibid.). In Schleiermacher’s view, it is not suitable to tempt scientists with other (external) goals for their work. In this view, different (national, personal, economic, etc.) interests rather than the knowledge for its own sake distract and hinder the search for truth.

Second, the other mistake states should avoid is a constraint or even a repeal of academic communication between different states. According to Schleiermacher, restrictions like these would never result in increased independence. Rather, he uses strong words when he says:

Wenn aber gar ein selbst mächtiger Staat, und der auch jenes Erobern mit Erfolg betreibt, wenig zufrieden mit dem, was er in diesem Fache schon geleistet hat, bis er das Fehlende ersetzen kann, auch noch die Sperre verordnet: so ist das offenbar ein Hochmut, eine Illiberalität, einer niedrige und geldsüchtige Ökonomie, die auch auf die Absicht jener Eroberungen ein noch nachteiligeres Licht wirft, und mehr als irgend etwas eine solche Regierung bei allen Gebildeten der Nation verhaßt machen muß.¹⁶
(Schleiermacher 2010, 133)

Schleiermacher’s considerations on the relation between the state that provides the necessary framework for the academic endeavour and the aim to strive for education and knowledge for its own sake could be summarised like this: the state should provide helpful structures and conditions but should keep itself subordinated with respect to academic work. This way the state will take part of the results that come from science but the scientific work will not solely be instrumentalised by extrinsic aims, and this in turn will guarantee that academic work only strives for nothing less than true and good knowledge. Fichte on his part relates the same insight into what he calls “Liebe zur Kunst.”¹⁷ He argues that academic education aims towards students becoming “artists of learning” (Fichte

2010, 14) and the principle that will take this art to the highest level is the “Liebe zur Kunst.” “Sie ist, wie alle Liebe, göttlichen Ursprungs und genialischer Natur, und erzeugt sich frei aus sich selber”¹⁸ (Fichte 2010, 25f).

Besides these more general considerations about the tension between academic Bildung and the need for structures and Ausbildung, von Humboldt, Fichte and Schleiermacher devote a major part of their essays to questions such as how to structure academic knowledge within different subjects and faculties, what characteristics should be expected from students and from lecturers, what student life should look like to avoid distractions from city-life, how lecturers should be remunerated (e.g. to avoid the above mentioned temptation of being instrumentalised by external interests), what the specific task of lectures and seminars is in the maturation of students, how students should be examined, how the sciences should aim for an encyclopaedic view of knowledge, how the results of the academic endeavour should be published to keep former students up to date about such issues as who now works in and for society.

In this wide range of themes, von Humboldt, Schleiermacher and Fichte make sure to repeatedly emphasise the importance of understanding knowledge as something more sophisticated than just pieces of information that can be gained, owned and produced. Rather, to know and to think is understood as more than a rational and logical process. An educated (*gebildet*) person knows different things (by heart), but he or she also knows how to use and handle the information, and what he or she is supposed and allowed to do with it (Schaffar 2014, 9). There is a deep moral implication in the Continental understanding of Bildung as the aim of education (Schaffar 2009). It is an education of the whole person’s character and not only some parts of a person’s capacities and skills. Bildung is meant as a combination of both intellectual, aesthetical and moral knowledge and skills¹⁹. This aim is abundantly clear in von Humboldt’s, Schleiermacher’s and Fichte’s essays. As Fichte points out, the most important in university education is to learn how to think, in order to be capable of an ongoing Bildung-process throughout one’s entire life (Fichte 2010, 97). University education should not only aim for excellent theoretical information, for new scientific and evidence-based knowledge, but also to a broader education of the whole person (in which excellent new scientific knowledge is an essential part).

To summarise, the modern architects of Continental Academia²⁰ were aware of the differences between Bildung and Ausbildung. They were aware of the need to educate students for different (administrative) positions in the state and society (the social and political need for Ausbildung), but stressed the importance of establishing, maintaining and preserving Bildung and the (scientific) search for knowledge for its own sake, i.e. emphasising certain forms of self-reflexivity although this did not often move beyond premises.

The reading of these classical Continental philosophers shows that there is no given place for higher education and science in societies. How Academia is structured, organised and valued is to be an ongoing discussion within all societies and a task for a global discussion. What kind of relationship universities and society have has always been a central question. What role does higher education

play in society and how does university education differ from education in schools? What can the university offer society and what space (and resources) is society willing to give to the university?

BILDUNG AS CRITIQUE AND THE CRITIQUE OF BILDUNG

Critique as a distancing from prevailing circumstances or hegemonies in culture is often expressed through the arts (theatre, literature, art), science and philosophy (university research) and religion, as well as the freedom of public speech and thought through the press and mass-media. These functions ideally serve as instances or conditions for critique, though in Western societies, critique in the arts and mainly within science partly substituted the religious form of critique. Critical reflection can occur both as a theoretical reflection (*episteme-theoria*), as a practical reflection in relation to the moulding of the physical world (*techne-poiesis*) and with respect to the social, human, world (*fronesis-praxis*) (Saugstad 2004). In many cases, it is difficult to draw the line between a practically- and a theoretically-oriented critique. In Western tradition, critique has also taken the form of both opinion and critical reflection (*doxa vs. episteme*): critique as insightful, rational reflection on the relationship between something universal and something particular (principle-example, ideal-real) in which intellectuals publicly and rationally argue, is something different than the sole expression of an attitude or an opinion, which is not necessarily well argued. In politics, rationality and opinion may be unified into a whole, and this is in fact what the modern concept of education aims at – to prepare individuals to participate in a procedural democracy and make informed decisions, but accept that these are still value-laden.

The case of Western tradition, and especially the concept of *Bildung*, thus shows that critique can be turned into an organic part of the societal system and become an integrative part in the tradition in order to optimise its functioning (e.g. Masschelein 2004). As we have seen, *Bildung* was thought to aim to improve the individual, the nation and humankind by being an open movement that is not defined in advance in order not only to iterate the established prevailing culture, but to exceed and transcend it.

This basic idea is one of the deep roots in the Continental tradition that gave rise to several philosophical and educational traditions, either as a consequence from *Bildung*'s inspiring idea or from the critique that the concept provokes. To give a very rough overview over the long and complex history of the *Bildung*-discussion, we want to distinguish between three analytical types of critiques that can be found.

First, we can distinguish a logico-conceptual type of critique. Throughout the *Bildung*-discussion, questions concerning the internal contradictions and weaknesses of the notion itself have been raised in various forms. *Bildung*'s escape from a positive definition renders a definitional understanding possible only in terms of, as previously mentioned, its negativity, such as borders. Thus, the concept of *Bildung* has been criticised for being unreachable for a sober scientific examination. *Bildung* has been called a "container word" with no analytical value

(Lenzen 1997, 949) or with any tangible or graspable content that might be empirically available (Tenroth 1988).

Further, a long-standing question within the European tradition of educational theory²¹ is what the advocates of *Bildung* mean by the *autonomous* or *self-determined* subject and how the pedagogical efforts support the establishment of an independent subject. The idea of a self-sufficient, transcendental 'I' was questioned early on by Fichte and Hegel and has today complex ramifications within philosophy (the philosophy of language, the philosophy of mind and ethics, see e.g. Frank 1991) and in educational theory (for an overview see e.g. Meyer-Drawe 2000; Ruhloff 1989). A core issue running through these discussions is how we explain what it means both to become and to be a subject (e.g. Ballauff 1965; Meyer-Drawe 1998). The two central aspects of *Bildung*, i.e. autonomy and emancipation, are questioned: if self-determination, critique, self-reflection and autonomy are organically coherent with Western liberal democracy and with the development of society within the frames of such an educational and political model, then the mentioned human characteristics would have to be brought to existence through the means offered by education. The modernist tradition of *Bildung* would then be functional and therefore lacking a real critical potential (e.g. Uljens 2009; Ricken 2006).

Second, *Bildung* has been criticised from a socio-political perspective. Here, it is argued that the aspiration and idea of *Bildung* stand in contrast to the real conditions in society that are characterised by different points of departure when it comes to education. Thus, this type of critique focuses on how *Bildung* perpetuates rather than abandons social inequality (e.g. Bourdieu & Passeron 1971; Bourdieu 1976; Fend 1980; Becker & Lauterbach 2004; Werner 2006). Bourdieu for example argues that *Bildung* has been used as an attribute that ensures social distinctions and conflicts. The socio-political perspective elucidates *Bildung* as a question of class, and not as in its ideal case, as open and available for whoever has the intellectual ability to become educated.

A third critique argues that the two critiques above, i.e. the logico-conceptual and the socio-political analyses, cannot and should not be considered as separate critiques. The critical theories (the Frankfurt School, especially Adorno (1959) and French poststructuralism, e.g. Foucault) criticise *Bildung* for having been serving and solidifying the existing cultural power-structures in such a corrupt way that educated individuals falsely believe they are able to utter critique, while the type or form of critique itself already is part of the structure. That is, a form of critique that follows the rules so to speak, and which is prepared by the school as an institution (for an overview and analysis, see e.g. Ricken & Rieger-Ladich 2004; Weber & Maurer 2006; Volkers 2008). Adorno and the Frankfurt School express this argument from a materialistic point of view and expound on how today's (popular) culture structures (and materially forms) our consciousness while the French critique is more idealistic and elucidates how our (performed, verbal) discourse structures the possible critique in advance.

This overview illustrates the dilemma in today's Western culture, philosophy and education. We are confronted with the question of how critique might be

possible at all. From what position and perspective can critique be uttered if the critical theories' objection is right and the way in which the Bildung-tradition aimed to educate critical, self-reflexive subjects is corrupting itself as an instrument of the prevailing power-structure?

HOW ARE BILDUNG AND CRITIQUE POSSIBLE? TWO PERSPECTIVES

Two ontological positions can be found in today's discussion on how Bildung and critique is possible. On the one hand, we find an ontological position: regardless of what we think and criticise, our critique is already a part of the power-structure; our self-perception of being able to think critically is deceptive, and both the content and the means of our critique run the risk of being already instrumentalised to stabilise the system. This position implies that critique is possible but some kind of pure critique is not. This position also describes a faceless structure that does not leave any alternative for action, so that the acting individual cannot be taken and conceived as responsible.

On the other hand, we may also adopt a non-deterministic position that might find support in von Humboldt's, Schleiermacher's and Fichte's arguments. Although given societal structures may, with respect to the possibility of Bildung, operate in a counteracting, counterproductive or delimiting fashion, these structures are nevertheless necessary to enable Bildung in the first place. Such a view reminds one of, and retains the possibility of, responsible agency. It invites and asks us to make use of the possibilities that these very structures provide for a genuine critique of the search for the good and the true. The individual must learn to live with a certain degree of mistrust – everything is not necessarily as it appears as something is made to appear as something. Demonstrating mistrust is not to lose hope; rather mistrust is a good ground for developing hope. For example, we learn that history is always reconstructive from our vantage point. But it is not meaningless to question history as such a reflection may have real consequences in the real world.

Ontological differences are in general characterised by a lack of empirical ways to decide which position is true or closer to what could be called realistic. Arguments that emanate from the deterministic position appear cynical from a non-deterministic viewpoint and vice versa; the determinist will call non-determinists naïve, romantic and unenlightened. Thus, the problem of how Bildung and critique are possible confronts us with a question about our own *attitude* towards the meaning we find in our ability to ask and to know. It is in this respect we understand the difference between Bildung and Ausbildung, as it is indicated in the writings of von Humboldt, Schleiermacher and Fichte, i.e. as a question of *attitude* or orientation towards knowledge and education, and not a difference in content or in distinct methods of teaching.

While Ausbildung refers to a view in which one's own education and the content that one learns are directed at a specific aim that has been planned and structured before the education takes place, the concept of Bildung points to the possible openness of meaning that the educational content will have in the

individual's life and in a societal context. That is, even those educational situations that are explicitly aimed to provide a formal education do not preclude that the learning subject only receives a certain content that will contribute to and deepen the subject's instrumentalised position within the prevailing power-structure.

This discussion has been carried out on a level of principles. The concrete situation in today's universities bears witness to how structures, control-systems and particular interests steer, feed off of and fundamentally thwart the necessary freedom, openness and creativity that is needed for Bildung. It might be the case that the present situation will give us occasion to abandon the idea of Bildung at the universities. Nevertheless, this will not be evidence for the deficit nature and the failure of the concept. Rather, Bildung as the striving for knowledge and critique might leave universities as institutions behind, but find expression in other ways.

NOTES

- ¹ Birgit.Schaffar@abo.fi; Michael.Uljens@abo.fi
- ² For an introduction to Bildung and a comparison between the Bildung-theoretical tradition and the pragmatic tradition, see e.g. Siljander, Kivelä and Sutinen (2012); for a discussion in relation to post-modernity, see e.g. Lövlie, Mortensen and Nordenbo (2011).
- ³ Cf. e.g. the postulation that learning foreign languages is more effective when beginning with Latin or Greek. The argument has been that Latin grammar will structure the mind in such a specific way that it will make it easier to learn any (European) language afterwards.
- ⁴ Cf. Henrich (1967). Although Kant assumed that individuals could not avoid the given world and its influence, it was still the individuals themselves who primarily, through their transcendental freedom, actively molded their relation to the world and thus avoided determinism. However, by this position the question is if any room is left for educative activities, or if, in the end, it is really the individual who has the final say, so to speak. In Kantian philosophy, it may become difficult to demonstrate in what sense education, in a wide sense of the concept, has a constitutive role for individuals becoming human.
- ⁵ That is why the concept of Bildung and what it implies has been used, misused, changed and stretched to quite different contexts to make it more easily available and assessable. Yet this does not mean that Bildung is a concept that could include any meaning and content. But it might be the case that it is rather a question of personal insight than an exact information-based definition that is needed to understand the notion of Bildung.
- ⁶ Transl. *On the Inner and Exterior Organisation of Higher Scientific Institutions in Berlin* (this and the following translations are our own, BS and MU).
- ⁷ Transl. *Request to Found the University of Berlin*.
- ⁸ Transl. *Deduced Plan to Found an Institution for Higher Education in Berlin*.
- ⁹ Transl. *Occasional Thoughts About Universities in the German Spirit. Together with an Appendix About One to Found*.
- ¹⁰ Transl. *How, Under the Given Circumstances of Time and Place, the Concept Might be Realised*.
- ¹¹ Transl. "... that for every performance in the positive society there has to be exterior frames and means, and it is the state's duty to provide these also for the treatment of the sciences; that not only how the state obtains these frames and means could harm the essence of Bildung, but the very fact that there are such exterior frames and means for something completely different will have a necessarily unfavourable influence and pull the Spiritual and the High down to the material and lower reality;

and that the state should thus eminently keep the inner essence of Bildung in sight, to compensate for what the state, although not out of its own fault, has spoilt or disabled.”

¹² Transl. *On the Relation of the Academic Society and the State*.

¹³ Transl. “haughty, pernicious boast.”

¹⁴ Transl. “the most peaceful and beautiful way to conquer others.”

¹⁵ Transl. “It might easily become dangerous for Academia if money is used as the only bait for scholars.”

¹⁶ Transl. “In case a self-empowered, independent state, that is successful in these captures [to win scholars for its own academic institution, BS, MU], is still not satisfied with what it already has achieved until it can replace what is missing, and in case this state is furthermore decreed on a barrier [between scholar exchange], then this is obviously an arrogance, an illiberality, a primitive and money-mad economy that will throw an unfavourable light on the intentions behind these captures, and will make this government abhorrent for every educated person throughout the nation.

¹⁷ Love of arts for their own sake, *l’art pour l’art*.

¹⁸ Transl. “This love, like every kind of love, is divine in its origin and of an ingenious nature, and it creates itself freely out of itself.”

¹⁹ Cf. even Kant’s famous definition of the guiding principle of enlightenment: “Enlightenment is man’s emergence from his self-imposed nonage. Nonage is the inability to use one’s own understanding without another’s guidance. This nonage is self-imposed if its cause lies not in lack of understanding but in indecision and lack of courage to use one’s own mind without another’s guidance. *Dare to know!* (*Sapere aude.*) “Have the courage to use your own understanding,” is therefore the motto of the Enlightenment.” Kant does not speak of the need for logical and rational (in a limited sense) skills to free us from the self-imposed nonage. He emphasises that courage is needed to become enlightened.

²⁰ Even if von Humboldt’s thoughts are central and important, it is worth noticing that von Humboldt’s ideas have been used differently throughout the time. While in today’s discussions his name often stands as an ideal vision of how Academia should be understood and organised, Paletschek e.g. describes three different receptions during the 20th century and talks about a “Humboldt myth” (Paletschek 2001).

²¹ For an analysis, see Delanty (1996).

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2. FACILITATING THE ACADEMY THROUGH THRESHOLD CONCEPTS AND TROUBLESOME KNOWLEDGE

The only real voyage of discovery consists not in seeing new landscapes, but
in having new eyes, in seeing the universe with the eyes of another.

Marcel Proust 1900

However we decide to facilitate the Academy, our deliberations will eventually, inevitably, oblige us to consider the Academy's curriculum, the nature of the knowledge we wish our students to encounter, and the nature of their learning and engagement. We need also to contemplate the kinds of attributes our graduates will need as they enter society and employment in the coming century. We cannot predict the future but we can help our students anticipate and prepare for it, and it is likely that in this process both students and their tutors will need to encounter a certain strangeness, and deal with knowledge that may be uncomfortable, challenging and 'troublesome.' In an increasingly globalised knowledge-based economy characterised by uncertainty, complexity, risk and speed, binary oppositions between 'ivory towers' and 'real world' environments appear increasingly outdated. In both contexts we require people who can demonstrate a capacity for enquiry and 'research-mindedness,' the resilience to tolerate periods of uncertainty and an openness to transformation. The purpose is to equip students to deal more effectively with problems and situations that they have not previously experienced. This is a tall order, and one which sits uncomfortably with the current prevailing educational notions of Neoliberalism and New Public Management (De Boer et al. 2007; Land & Gordon 2013) which tend to construct students as relatively passive consumers of services much in the manner of a hotel customer. If we require a changed metaphor it is that, rather, of a gym, where the student makes use of excellent resources, expert advice, guidance and direction in order to undergo transformation. They are less consumer than actively and responsibly engaged client. Such a view resonates with Dewey's view (1933, cited in HLGME 2013, 3) that "The path of least resistance and least trouble is a mental rut already made. It requires troublesome work to undertake the alteration of old beliefs." This, clearly, is an approach which goes beyond simplistic consumer satisfaction models and exposes the participant to personal transformation or 'troublesome work.' As Lee Shulman (2005, 4), speaking of 'pedagogies of uncertainty,' observed more recently:

In these settings, the presence of emotion, even a modicum of passion, is quite striking – as is its absence in other settings. I would say that without a certain amount of anxiety and risk, there's a limit to how much learning occurs. One must have something at stake. No emotional investment, no intellectual or formational yield.

THRESHOLD CONCEPTS

To encourage discussion in this regard I wish to outline the notion of Threshold Concepts, a discipline-based and transformative model of learning which can be used as a conceptual tool and an analytical framework to inform course and programme design. Threshold Concepts can be considered akin to a portal, opening up a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, without which the learner cannot progress, and invariably involves a shift in the learner's subjectivity, or sense of self. As a consequence of comprehending a threshold concept, there is a transformed internal view of subject matter, subject landscape, or even world view. This transformation may be sudden or protracted, with the transition to understanding often involving 'troublesome knowledge.' Depending on discipline and context, knowledge might be troublesome because it is ritualised, inert, conceptually difficult, alien or tacit, because it requires adopting an unfamiliar discourse, or perhaps because the learner remains 'defended,' resisting the inevitable ontological shift which, as we shall see, threshold concepts entail. Difficulty in understanding threshold concepts may leave the learner in a state of 'liminality,' a suspended state or 'stuck place' in which understanding approximates to a kind of 'mimicry' or lack of authenticity.

The notion of 'Threshold Concepts' was first presented at the 2002 Improving Student Learning conference in Brussels (Meyer & Land 2003). A substantial corpus of empirical evidence and conceptual analysis for threshold concepts has since developed, drawn from several hundreds of scholarly papers in over a hundred disciplinary contexts and from authors in the higher education sectors of nearly forty countries (Flanagan 2014). It is designed as a generic framework which eschews any attempt at an essentialist classification but views knowledge as instantiated in local practices and through disciplinary variations.

The approach builds on the notion that there are certain concepts, or certain learning experiences, which are akin to passing through a portal, from which a new perspective opens up. This allows the learner to enter new conceptual territory in which things formerly not within view are perceived. This permits a new and previously inaccessible way of thinking about something. It represents a transformed way of understanding, or interpreting, or viewing something, without which the learner cannot progress, and results in a reformulation of the learners' frame of meaning. The thresholds approach also emphasises the importance of disciplinary contexts, as the conceptual boundaries that are crossed are part of disciplinary structures and formation. As a consequence of comprehending a threshold concept there may thus be a transformed internal view of subject matter,

subject landscape, or even world view. Typical examples might be ‘Marginal Cost,’ ‘Opportunity Cost’ or ‘Elasticity’ in Economics; ‘Evolution’ in Biology; ‘Gravity’ or ‘Uncertainty in Measurement’ in Physics; ‘Reactive Power’ in Electrical Engineering; ‘Depreciation’ in Accounting; ‘Precedent’ in Law; ‘Geologic Time’ in Geology; ‘Uncertainty’ in Environmental Science; ‘Deconstruction’ in Literature; ‘Limit’ in Mathematics or ‘Object-oriented Programming’ in Computer Science.

Meyer and Land (2003, 2005) characterise such conceptual gateways as *transformative* (occasioning a significant shift in the perception of a subject), *integrative* (exposing the previously hidden inter-relatedness of something) and likely to be, in varying degrees, *irreversible* (unlikely to be forgotten, or unlearned only through considerable effort). They are also frequently *troublesome*, for a variety of reasons (Perkins 2006). These learning thresholds are often the points at which students experience difficulty. The transformation may be sudden or it may be protracted over a considerable period of time, with the transition to understanding often involving ‘troublesome knowledge.’ Depending on discipline and context, knowledge might be troublesome because it is ritualised, inert, conceptually difficult, alien or tacit, because it requires adopting an unfamiliar discourse, or perhaps because the learner remains ‘defended’ and does not wish to change or let go of their customary way of seeing things. Ascertaining the extent to which an individual student may have understood a threshold concept can be difficult and highlights the crucial importance of assessment in this regard. Baillie, Bowden and Meyer (2013, 235f) discussing student learning in Materials Engineering, highlight such difficulty in relation to the threshold concept of ‘viscoelasticity.’ They are discussing what it is particularly about this concept that their students find hard to understand:

It may be time/temperature dependency, which is hard to grasp – students cannot seem to understand why, for example, one of the properties of plastic (e.g. modulus) will change depending on how fast a load is applied to it. If we propose that viscoelasticity is a threshold concept, without uncovering its associated troublesome way of thinking, we might for example test students on their knowledge of the Maxwell/Voigt models and assume from successful results that they ‘understand’ viscoelasticity. However, Maxwell/Voigt models are not equivalent to viscoelasticity. When we teach concepts as what Baillie has called constructs – models or theories that we have created to understand the concept but which are obviously a human-made reduction (Baillie and Vanasupa 2003) – we find that students do not necessarily come to understand the concept itself. We might cause ourselves to conclude mistakenly that they do, by setting an examination on the use of the construct, e.g. Maxwell/Voigt. What we should be trying to do is to uncover these thresholds and ensure that we are helping students to learn what we really want them to learn, and making sure that we are assessing them on that learning – however we word the concepts or thresholds. Hence

viscoelasticity is clearly a threshold concept but so is ‘time/temperature dependence of polymers’ a threshold in relation to that concept.

This kind of pedagogical analysis enables us to gain better insights into how we might present complex and unfamiliar phenomena to our students, and how we might assess them. This specific example also vividly demonstrates how conceptual material is commonly interlinked or clustered within the student’s understanding.

RUPTURE AND UNCERTAINTY

Transformation is often troublesome because in addition to integrating new conceptual material it entails a letting go of a prior familiar view. It involves an uncomfortable *ontological* shift. We are what we know. Insights gained by learners as they cross thresholds can be exhilarating but might also be unsettling, requiring a change in subjectivity and, paradoxically, a sense of loss. The notion of a threshold has always demarcated that which belongs within, the place of familiarity and relative security, from what lies beyond – the unfamiliar, the strange, the potentially threatening. It reminds us that all journeys begin with leaving that familiar space and crossing over into the riskier space beyond the threshold. So, too, with any significant transformation in learning.

Threshold concepts scholarship is concerned (directly or indirectly) with encountering unfamiliarity and the discomfiting conceptual and ontological shifts which that entails. As Schwartzman (2010, 38) has pointed out, “Real learning requires stepping into the unknown, which initiates a rupture in knowing ... By definition, all Threshold Concepts scholarship is concerned (directly or indirectly) with encountering the unknown.” The English educational philosopher Ron Barnett argues that:

The student is perforce required to venture into new places, strange places, anxiety-provoking places. This is part of the point of higher education. If there was no anxiety, it is difficult to believe that we could be in the presence of a higher education. (Barnett 2007, 147)

Royle makes a similar point about the positive value of dwelling within states of uncertainty.

Intellectual uncertainty is not necessarily or simply a negative experience, a dead-end sense of not knowing, or of indeterminacy. It is just as well an experience of something open, generative, exhilarating, (the trembling of what remains undecidable). I wish to suggest that ‘intellectual uncertainty’ is ... a crucial dimension of any teaching worthy of the name. (Royle 2003, 52)

LIMINALITY

Difficulty in understanding threshold concepts may leave the learner in a state of ‘liminality’ (Latin: *limen*, threshold), a suspended state or ‘stuck place’ in which

understanding approximates to a kind of ‘mimicry’ or lack of authenticity. Liminality, a notion drawn from anthropology (Van Gennep 1960; Turner 1969) can be considered as a kind of flux. It is a space provoked by an encounter with a threshold concept or threshold practice which renders the student’s understanding fluid, less certain than formerly, which may engender a process of transformation in the learner. The early thresholds literature (Meyer & Land 2005) presents it as a suspended state in which students sometimes can struggle to cope and in which they might revert to mimicry. It may be experienced as entailing a sense of *loss*, a space where one has to let go of prevailing ways of seeing, prior familiar understandings, and comfortable existing schemata. The latter have to weaken, or loosen, or be transformed, in order to gain a newer way of seeing, or newer mode of subjectivity. Letting go in that way is challenging and a key source of troublesomeness.

Liminality incurs a changing of function or a changing of state. Such changes often involve the kind of oscillation that anthropologists report, such as in adolescence, for example, where individuals fluctuate between childlike and adult behaviours. Understanding can come into and out of focus in a similar manner:

Q. Did you feel the same as student 1?

Second student: Yeah. I felt lost.

Q. In lecture times as well?

Second student: You know, I understood the concept for about let’s say 10 seconds, yes yes, I got that and then suddenly, no no, I didn’t get that, you know, suddenly, like this. (Orsini-Jones 2006)

The changed perspective here remains unstable and eludes the learner’s grasp.

Transformation is invariably accompanied by a changed use of discourse. The liminal would appear to be a site of discursive shift. We are aware of Vygotsky’s (1978) emphasis on the learner’s encounter and engagement with language and of how it becomes a space, the writing space, which can be a key factor in transformation. The encounter with unfamiliar discourse, or different uses or forms of language, is frequently the trigger that provokes a state of liminality and subsequent transformation in the learner’s understanding of a particular phenomenon. Such linguistic encounters might be experienced as troublesome, as alien, counter-intuitive, or perhaps exhilarating, but this engaging struggle with meaning through talk and subsequent written expression seems to serve as a crucible in which new understanding is forged. We are reminded of T.S. Eliot’s “intolerable wrestle with words and meanings” (1974). Intolerable, perhaps, at times, but always invaluable. Here is a quote from a group of medics (Becker et al. 2005) discussing how, in a very powerful way, this takes place in medicine.

... students acquire a point of view and terminology of a technical kind, which allow them to talk and think about patients and diseases in a way quite different from the layman. They look upon death and disabling disease, not

with the horror and sense of tragedy the layman finds appropriate, but as problems in medical responsibility.

Medical students employ medical discourse to discuss matters such as pain, which can signify something very different to medics than what it does to the non-specialist, and serves as an essential tool for diagnostic reasoning. It serves also partly to effect an important ontological shift in practitioners who have to deal on a daily basis with extreme and often distressing situations that the lay person generally does not. It comes to form part of the way that medics come to think and practise.

The liminal space can also be seen as a creative space. It can be the space where, as we have mentioned, people get stuck, but it is also the space where things become fluid.

No, I think you're misunderstanding me ... we're not talking here about our students coming out of this liminal space ... this liminality, whatever. We're saying we want them to stay in it. We want them to stay precisely in that fluid state. That complexity ... that emergence, because in that way their ideas won't become crystallised, they won't harden and get stylised. Their ideas will stay emergent ... provisional, exploratory ... Still with lots of unexplored possibilities. Fresh. That's what we want. Keeping that way of seeing. We want them – and their ideas – to stay held in that tension. That's the creative space. (Lecturer, Art School – personal communication)

Here the liminal offers a provisional, exploratory space with unexplored possibilities – theoretically, an almost perpetual liminal state of creativity.

Liminality would appear to be a difficult space of *emergence* in which emergent entities (in this case thoughts or states) 'arise' out of more fundamental entities and yet are 'novel' or 'irreducible' with respect to them (Lewes 1875). Transformation, as an emergent, is a higher-level property, which cannot, in Lewes' sense, be easily deduced from, or explained by, the properties of lower level entities. The re-thinking, re-formation or re-authoring of ideas, or the re-scripting or re-inventing of identities in a liminal space appear to demonstrate this quality of emergent property, it is not immediately discernible or ascertainable how such a state has arisen from, or can be reduced to, the lower level entities.

The notion of transformation is in itself problematic. The idea of transformation in learning is open to being criticised as a humanist and essentialist model. Ross (2011, 226) points out that:

transformation has to be understood as a matter of shifting subjectivity, not as deep changes to an essential selfhood. Subjectivity is best understood as always in process, and so shifts are commonplace, part of the negotiations that take place as a result of the discursive nature of subjectivity.

Processing shifts in subjectivity in this way, she argues, is a principal purpose of reflection in the educative process, "a purpose that may still be complex and contestable, but which at least has the benefit of being open to analysis."

Subjectivity might also be considered as a discursive or narrative effect, “a character in a story as much as the “author” of the story,” according to Usher, Bryant and Johnson (2002, 88). It is never “a once-and-for-all construction,” and the experience of meaning is never something permanently fixed. “Subjectivity,” they conclude, “is therefore always shifting and uncertain and has to be continually ‘re-formed’” (ibid.).

Hence the progressive function of the liminal state might be characterised as comprising a countenancing and integration of something new, whilst at the same time acknowledging the shortcomings of one’s existing view. There is then an obligation to let go of the older prevailing view, and frequently with that a letting go of an earlier mode of subjectivity. This entails a “re-authoring of self” as Jen Ross (2011) terms it, or as one of her students refers to it, “undoing the script of yourself.” “The moment we recognise that the self is not something ready-made, but something in continuous formation through choice of action, the whole situation clears up” (Dewey 1916, 235). This process involves the acquiring, and coming to own, internalise and employ new forms of written and spoken discourse.

EPISTEME

A further complication might be the operation of an ‘episteme’ or ‘underlying game’ of knowing which requires the learner to comprehend the often tacit games of enquiry or ways of thinking and practising inherent within specific disciplinary knowledge practices. Perkins (2006, 42) characterises such an episteme as:

... a system of ideas or way of understanding that allows us to establish knowledge ... the importance of students understanding the structure of the disciplines they are studying. ‘Ways of knowing’ is another phrase in the same spirit. As used here, epistemes are manners of justifying, explaining, solving problems, conducting enquiries, and designing and validating various kinds of products or outcomes.

Strathern’s (2008) ‘knowledge practices’ would be similar as would Wenger’s (1998) view of knowledge within a community of practice, which “... includes all the implicit relations, tacit conventions, subtle cues, untold rules of thumb, recognizable intuitions, ..., embodied understandings, underlying assumptions, and shared world view.”

The threshold approach emphasises the contingent and changing nature of knowledge. Curricula, and disciplines themselves, can only ever be provisional stabilities. David Perkins (2010) has observed that threshold concepts work better when “more exploratory and eclectic than categorical and taxonomic.” The fecundity of threshold concepts, he argued, derived from “the evolutionary proclivity of the idea toward adventurous and fruitful mutation.” We have argued elsewhere (Meyer & Land 2005) that an objectivist position would contradict our initial characterising of threshold concepts as discursive in nature, subject to the endless play of signification which language implies. This would, furthermore,

disregard the inevitable variation in the forms that learners’ understandings might take.

The thresholds approach has significant implications for both course design and assessment. It indicates for example that learning requires a certain recursiveness (coming at the troublesome knowledge through differing modes) which is not easily accommodated within ‘short, fat’ modules or semesters. It implies a need for a more dynamic form of assessment capturing progression through the liminal phase at different points – a flickering movie perhaps rather than a single snapshot. It also implies a listening for student understanding to which packed schedules and large class sizes are not entirely conducive.

SIGNIFICATION

Learners have an existing stock of existing concepts and they all have labels for these signs. As we go through a programme of learning in higher education we can see this as a process of adding signs to our collection. Within a Saussurean system of semiotics (Saussure 1916), where does this sign fit in, how do I link this to all the other signs I already have? Our analysis of what a particular sign means, or signifies, is related to all the other signs we have in our system. So how does signification relate to liminality?

Vivian (2012; see also Land, Rattray, & Vivian in press) represents the liminal process graphically as a tunnel rather than a threshold, in that for most of the time the learner cannot discern the exit.

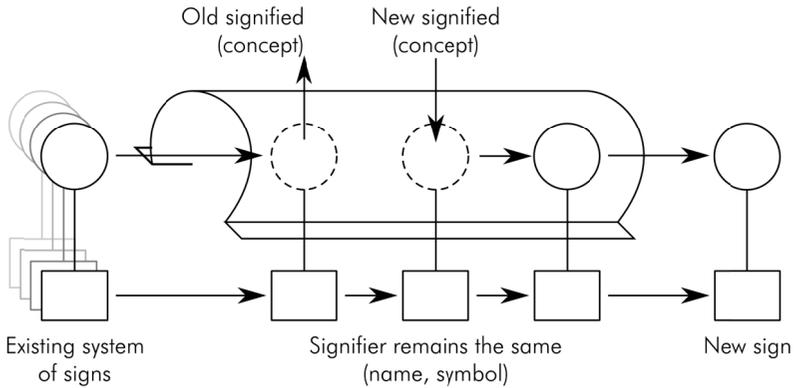


Figure 1. Signification in the liminal state (Vivian 2012)

Note that the tunnel is drawn in the conceptual domain, which is internal to the individual learners and tutors. Communication between these individuals, however, is in the physical domain where the oral and graphic signifiers play their part.

Whatever is *signified* will be in the liminal conceptual domain, not in the physical domain of sound or vision.

But how might the teacher become aware of the individual learner's liminal state? Within a module of, say, twelve weeks, can we in feasible, practical terms get at this? Or are these understandings, as in Richard Gomm's (2004) opinion, "unverifiable because they are matters of self-knowledge and not accessible to others"?

The student's understanding of these new signs, or 'altered' signs, according to Vivian (2012), depends on bringing together in a coherent way a number of conceptual elements – for example the student may have to get a grip on a number of economic concepts and bring them all into a coherent relationship. If any of those representations are poorly understood or misunderstood then the student will have difficulty bringing them together. Any concept has to be described or represented using already familiar signs, and if any of these are poorly understood then the description or representation will be misunderstood. Perhaps the threshold concept is so troublesome not because the concept is so difficult but because it challenges the learner's understanding of its component concepts and this is why it acts as a check point for the learner's progress.

Learners need to engage with and manipulate conceptual materials i.e. the physical means of describing, discussing and exploring concepts. These are the signifiers in the physical domain. What tends to happen in most teaching sessions is that the teacher physically exchanges these signifiers by providing images, diagrams, words, written textual statements – all the different kinds of signs, hoping that what the student will pick up is what the teacher is signifying, what is in the teacher's understanding as a signifier, and that this will bring about the desired transformation. The teacher creates a framework of engagement by setting tasks designed to motivate the learner to engage with conceptual matters (i.e. the signifieds) by transforming the signifiers from one context to another. The teacher can then infer understanding on the part of the learner by comparing the learner's transformation with their own transformation.

The assessment evidence, the student's new representation, has to indicate this changed signification, their understanding of a new set of signifiers or an altered set of signifiers. Sometimes this is patently obvious by what students produce and at other times it isn't. It can be hard to know whether they have 'got it' or not. A further complication is that students during an assessment may not wish to reveal their lack of understanding to the teacher-as assessor, that they haven't understood what is being signified.

What does seem to happen is that when a new or an altered sign enters a sign collection we get a new collection of signs. The new sign affects and then reconfigures the other signs. It alters the student's discourse as they start using these signs and these new signifiers. The student has to integrate them and use them in a sense which links to all their other existing signifiers. If not, they will experience a degree of dissonance.

As Vivian (2012) argues, "generally speaking different dialects can be recognised because there are changes in the signifiers, but sometimes the signifiers

stay the same and so the altered understandings are not self-evident. The change in dialect goes unnoticed.” Sometimes students haven’t realised how their tutor is now using a particular signifier, term, image, diagram or model in a more sophisticated, elaborate or advanced way. The students may not be realising that since they may be working with an earlier model. Similarly the tutor may not realise that their students are actually working from an earlier signifier because both tutor and students are, in the physical domain, still using the same signifier even though its meaning may have shifted in the tutor’s usage.

From a threshold point of view the acquisition of a single concept, e.g. gravity in physics, or osmosis in biology, seems to be able to affect a shift both in understanding and in the learner’s perception of him or herself.

Adding a new concept to a learner’s collection can affect the understanding of other concepts in that collection, so that over time the whole collection develops and changes. The threshold concept can be a conceptual straw that breaks the camel’s back – or a piece in a jigsaw of concepts that causes them to coalesce and produce a step change in perception. (Vivian 2012)

Adding a new concept to a learner’s sign collection can affect the understanding of all the other concepts in that collection. So over time the whole collection morphs, develops and is transformed. This is likely to involve a troublesome process of integration in which this new fitting of everything together in a new configuration requires a letting go of a previously strong and enduring schema. Relinquishing this is likely to entail an ontological shift.

TRANSACTIONAL CURRICULUM INQUIRY

The thresholds approach is neither teacher-centred nor student-centred and invites disciplinary academics “to deconstruct their subject, rather than their educative practice, thus leaving them within both safe and interesting territory” (Cousin 2007). It is now being used as a curriculum design tool, a mode of pedagogical research and an approach for the professional development of new academics. Flanagan’s (2014) comprehensive website on thresholds indicates how recent scholarship around the world has challenged and extended the theoretical boundaries of the thresholds framework in relation to our understandings of transformation, liminality and students’ experience of difficulty.

Cousin (2008, 269f) maintains that the search for threshold concepts has the potential to open up discussions and co-inquiry among subject experts, students and educational researchers, creating what she terms “forms of transactional curriculum inquiry” between these three parties. This holds out for these key actors a “pursuit of shared understandings of difficulties and shared ways of mastering them.” The thresholds framework, as one form of transactional inquiry, offers, she suggests, an approach “which becomes neither student-centred nor teacher-centred but something more active, dynamic and in-between” (270). She has designed a practical process for the investigation of threshold concepts (Cousin 2009, 201-212) within disciplines, which she has termed *transactional curriculum inquiry*,

given its emphasis on establishing dialogues between teachers, students and educationalists. This process explores the following questions:

- What do academics consider to be fundamental to a grasp of their subject?
- What do students find difficult to grasp?
- What curriculum design interventions can support mastery of these difficulties?

IMPLICATIONS FOR THE ACADEMY

The thresholds approach discussed above, I would argue, has significant implications for the facilitation of both course design and assessment in the Academy:

- It draws attention to *what matters most* in a curriculum, and what will be of lasting importance in the longer term. In this respect threshold concepts can be viewed as the ‘jewels in the curriculum.’
- It can serve to *streamline* curricula that have become overly ‘stuffed.’
- It implies a need to offer *various modes of learning* in helping students acquire understanding of a complex phenomenon. This will entail coming at the same issues in different ways at different times.
- Hence the approach indicates that learning requires a certain *recursiveness* (revisiting the troublesome knowledge again through differing experiences). This is not easily accommodated within ‘short, fat’ modules or semesters.
- The approach also suggests the need for more *dynamic forms of assessment* which can capture a learner’s progression through the liminal phase at different points – a ‘flickering movie’ perhaps, rather than a single ‘snapshot.’

Most difficult of all within the modern Academy, particularly those that have undergone significant massification, is the implication for a listening for student understanding to which packed schedules and large class sizes are not entirely conducive. The thresholds approach, as we have seen, seeks to identify sources of troublesomeness and misunderstanding for students, which can point to the need for revisions in the course design. That said it also operates from a premise that encounter with troublesome or discomfiting knowledge is often a necessary condition of transforming students’ perception of complex and difficult phenomena, and normal process of learning within a higher system of education. Furthermore transformative learning of this kind incurs a reconstitution of self, a shift in subjectivity. Grasping a concept is never just a cognitive shift; it also involves a repositioning of self in relation to the subject. From the viewpoint of curriculum design it follows that some attention has to be paid to the discomforts of troublesome knowledge. On the other hand learners tend to discover that what is not clear initially often becomes clear over time. This is a metacognitive issue for students in terms of having to learn to tolerate uncertainty, complexity and ambiguity as part of what they have signed up to. As mentioned at the outset passive consumer or service orientation will not serve the student as well in this regard as the active and responsible engagement of a client with a vested interest in their own development and collaboration with others.

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